

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

**(19) World Intellectual Property Organization
International Bureau**



A standard linear barcode is located at the bottom of the page, spanning most of the width.

(43) International Publication Date
5 July 2001 (05.07.2001)

PCT

(10) International Publication Number
WO 01/49079 A1

(51) International Patent Classification:	H05B 6/68	Woon [KR/KR]; 1228-803, Mock-ryun Hanyang Apartment, Saabong-dong, Kunpo-city, Kyungki-do 435-046 (KR), JANG, Seong, Deog [KR/KR]; 111-45, Maetan-2-dong, Paldal-gu, Suwon-city, Kyungki-do 442-372 (KR), KANG, Kwang, Seo [KR/KR]; 304-803, Sunkyung Apartment, Ingye-dong, Paldal-gu, Suwon-city, Kyungki-do 442-070 (KR), SUNG, Han, Ju [KR/KR]; 909-202, Jukong Apartment, 970-3, Youngtong-dong, Paldal-gu, Suwon-city, Kyungki-do 442-470 (KR).
(21) International Application Number:	PCT/KR00/01346	
(22) International Filing Date:	22 November 2000 (22.11.2000)	
(25) Filing Language:	Korean	
(26) Publication Language:	English	(74) Agent: JEONG, Hong, Sik; 9th Floor, Daelmin Building, 1600-3, Seocho-dong, Seocho-ku, Seoul 137-070 (KR).

(30) Priority Data: 1999/56264 9 December 1999 (09.12.1999) KR **(81) Designated States (national):** CA, CN, JP, US.
1999/56267 9 December 1999 (09.12.1999) KR
2000/9899 28 February 2000 (28.02.2000) KR **(84) Designated States (regional):** European patent (DE, FR, GB).

(71) Applicant (for all designated States except US): SAM-SUNG ELECTRONICS CO., LTD. [KR/KR]; 416, Maetan-dong, Paldal-gu, Suwon-city, Kyungki-do 442-742 (KR).

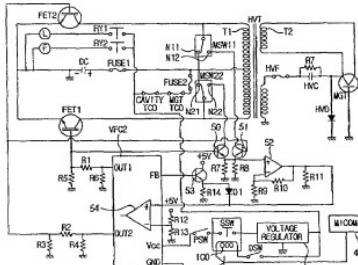
Published:
— With international search report.

(72) Inventors; and
(75) Inventors/Applicants (*for US only*): HAN, Yong,

(75) Inventors/Applicants (for US only): HAN, Yong,

ance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DRIVING CIRCUIT OF DC MICROWAVE OVEN AND METHOD OF CONTROLLING THE SAME



(57) **Abstract:** The present invention relates to a driving circuit of a DC microwave oven and a method of controlling the same for driving a magnetron through a conversion of a DC voltage into an AC voltage. The driving circuit includes an excessive current detecting unit is provided for detecting a current supplied from the DC power supply to the inverting unit, and outputting an excessive current detecting signal to the pulse driving unit to cut off the generation of the driving pulses of the pulse driving unit if the detected current corresponds to an excessive current. The driving method includes a) driving the pulse driving unit by controlling the switching unit if a cooking chamber door is closed and a cooking start selection signal is inputted; b) detecting whether an excessive current is supplied to the high voltage transformer through the inverting unit driven by the pulse driving unit; and c) cutting off the voltage supply to the magnetron by stopping the driving of the pulse driving unit if the excessive current is detected.

WO 01/49079 A1